In the claims:

- 1. 20. (Cancelled)
- 21. (Currently Amended) An immunogenic composition comprising at least one peptide which is an amino acid sequence subunit of *S. mutans* glucosyltransferase B which is of sufficient of 15 21 amino acids in length to raise an immune response in a mammal to whom it is administered comprising an amino acid sequence selected from the group consisting of:
- a) SEQ ID NO: 1; and
- b)——SEQ ID NO: 2; SEQ ID NO: 10; SEQ ID NO: 11; SEQ ID NO: 12; SEQ ID NO: 13; SEQ ID NO: 14; SEQ ID NO: 15; SEQ ID NO: 16; SEQ ID NO: 17; SEQ ID NO: 18; and SEQ ID NO: 19.
- 22. (Original) An immunogenic composition comprising at least one peptide consisting essentially of SEQ ID NO: 3.
- 23. (Currently Amended) An The immunogenic composition according to Claim 2021 wherein 2 or more peptides are present and arranged on a core matrix of 3 or more lysines.
- 24. (Cancelled)

APPLICANTS: Smith and Taubman

SERIAL NUMBER: 09/290,049

25. (Currently Amended) An immunogenic composition comprising at least two peptides covalently attached to a peptidyl core matrix, wherein each peptide is an amino acid sequence subunit of *S. mutans* glucosyltransferase *B* which is of sufficient of 15 - 21 amino acids in length to raise an immune response in a mammal to whom it is administered comprising an amino acid sequence selected from the group consisting of:

a)——SEQ ID NO: 1; and

b)—SEQ ID NO: 2; SEQ ID NO: 10; SEQ ID NO: 11; SEQ ID NO: 12; SEQ ID NO: 13; SEQ ID NO: 14; SEQ ID NO: 15; SEQ ID NO: 16; SEQ ID NO: 17; SEQ ID NO: 18; and SEQ ID NO: 19.

26. - 27. (Cancelled)

28. (Currently Amended) An The immunogenic composition according to Claim 2425 wherein the peptidyl core matrix comprises at least one lysine.

29. - 32. (Cancelled)

33. (Currently Amended) An The immunogenic composition according to Claim 3125 wherein 2 or more of the peptides are present and arranged on a core matrix of 3 or more lysines.

34. - 80. (Cancelled)

81. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 1.

SERIAL NUMBER: 09/290,049

- 82. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 2.
- 83. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 10.
- 84. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 11.
- 85. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 12.
- 86. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 13.
- 87. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 14.
- 88. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 15.
- 89. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 16.
- 90. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 17.
- 91. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 18.

APPLICANTS: Smith and Taubman

SERIAL NUMBER:

09/290,049

- 92. (New) The immunogenic composition of Claim 21, wherein said amino acid sequence is SEQ ID NO: 19.
- 93. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 1 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 94. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 2 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 95. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 10 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 96. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 11 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 97. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 12 and an amino acid sequence

APPLICANTS:

Smith and Taubman

SERIAL NUMBER: 09/290,049

selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

- 98. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 13 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 99. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 14 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 100. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 15 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 101. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 16 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.
- 102. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 17 and an amino acid sequence



SERIAL NUMBER:

09/290,049

selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

103. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 18 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

104. (New) The immunogenic composition of Claim 25, wherein said at least two peptides is an amino acid sequence of SEQ ID NO: 19 and an amino acid sequence selected from the group consisting of SEQ ID NOs: 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19.

105. (New) The immunogenic composition of Claim 22, wherein 2 or more peptides are present and arranged on a core matrix of 3 or more lysines.